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Selected List of Publications
WESTERN REGIONAL RESEARCH LABORATORY, ALBANY, CALIFORNIA
Bureau of Agricultural and Industrial Chemistry
Agricultural Research Administration
U. S. Department of Agriculture

The mimeographed materials are available on request. A limited number of bulletins and reprints of some of the journal articles are also available. Those not available are marked with an asterisk (*). Those listed for the first time are preceded by a plus (+).

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DEHYDRATION OF FOODS

Information on dehydration (mimeographed):

- 1 Brine peeling of various root vegetables. 1943. Revised 1944.
- 7 Dehydrated onions. 1943.
- 8 Dehydrated sweetpotatoes. 1943.
- 9 Dehydrated white potatoes. 1943.
- 15 Bin-type finishing driers in vegetable dehydration. 1943. Revised 1944.
- 16 Production of major fruits in the United States. 1943.
- 18 Dehydrated cabbage and celery. 1943.
- 23 Analysis of processing costs in vegetable dehydration. 1943.
- 31 Application of drying rate nomographs to the estimation of tunnel-dehydrator drying capacity.
 - I Riced white potatoes. 1943.
 - II Blanched sweet corn. 1943.
 - III White potato strips--vertical air flow. 1944.
 - IV Shredded cabbage. 1944.
 - V Onion slices. 1944.
 - VI Sweetpotato strips. 1944.
- 35 Determination of ascorbic acid in fresh, frozen, and dehydrated foods. 1943.
- 39 Cost accounting for vegetable dehydration plants. 1944.
- 47 The sampling and analysis of gases in cans of dehydrated vegetables. 1944.
- 58 New peroxidase test procedure for dehydrated potatoes to indicate adequacy of blanching. 1944.

Information on dehydration (unnumbered, mimeographed):

- The waste disposal problem in vegetable dehydration.
- Sources of preparation equipment for vegetables for dehydration.
- Manufacturers of drying equipment for food and allied products.

Dehydrator designs:

- Type A - Transverse-flow cabinet dehydrator.
- Type G - 35-ton center-exhaust tunnel dehydrator with recirculation.
- Type I - Steam-heated cabinet dehydrator (single-truck unit).
- Type J - Steam-heated cabinet dehydrator (double-truck unit).
- Type K - Coal-burning cabinet dehydrator (single-truck unit).
- Type L - Coal-burning cabinet dehydrator (double-truck unit).
- Type N - Vegetable dehydrator, tunnel type, two-stage.
- Type O - Cabinet dehydrator with cabinet blancher and bin finisher.
- Types P, Q - Counterflow tunnel dehydrators.
- Dwg. C-76 - Onion bin drier.
- Dwg. D-96 - Multibin finisher.
- Dwgs. C-112, 113 - Laboratory experimental cabinet drier.
- Dwg. C-115 - Steam heating arrangements for tunnel dehydrators.
- Dwg. A-118 - Friction stop for trucks.

Preparation-equipment designs:

- Dwg. C-79A - Radiant-heat oil-fired root peeler.
- Dwg. C-80A - Appurtenances for radiant-heat root peeler.
- Dwg. D-101 - Continuous steam blancher, Model B.
- Dwg. D-108 - Tray-loading and de-traying table.
- Dwg. D-109 - Brine peeler, No. 1.
- Dwg. D-111 - Brine peeler, No. 2.
- Dwg. D-116 - Picking and trimming table.

Bulletins on dehydration:

- Commercial dehydration of vegetables and fruits in wartime. U. S. Dept. Agr. Misc. Pub. 524. 29 pages. 1943.
- Vegetable and fruit dehydration. A manual for plant operators. U. S. Dept. Agr. Misc. Pub. 540. 218 pages. 1944.

Journal articles on dehydration:

- E. A. Beavens. Cabinet dehydrators suited to small-scale operations. Food Indus.: I. 16(1):70-72, 116. 1944.
 - II. 16 (2):90-92, 134. 1944.
 - III. 16(3):75, 135-136. 1944.
- *E. A. Beavens. Food dehydration--a revived industry. Rural New Yorker. Jan., 1943.
- *E. A. Beavens. Recent advances in methods of food dehydration. Rural New Yorker. April, 1943.
- A. H. Brown and P. W. Kilpatrick. Drying characteristics of vegetables--riced potatoes. Trans. Amer. Soc. Mech. Engin. 65(11):837-842. Nov., 1943.
- M. E. Davis and L. B. Howard. Effects of varying conditions on the reconstitution of dehydrated vegetables. Proc. Inst. Food Technol., pp. 143-155. 1943.

- *W. B. Davis. Quantitative field test for estimation of peroxidase. Indus. and Engin. Chem., Analyt. Ed. 14(12):952-953. 1942.
- F. DeEds. Dehydrated food in war and peace. Calif. and Western Med. 60(5):1-12. 1944.
- H. J. Dutton, G. F. Bailey, and E. Kohake. Dehydrated spinach. Changes in color and pigments during processing and storage. Indus. and Engin. Chem. 35(11):1173-1177. 1943.
- A. A. Klose, G. I. Jones, and H. L. Fevold. Vitamin content of spray-dried whole egg. Indus. and Engin. Chem. 35(11):1203-1205. 1943.
- *H. J. Loeffler and J. D. Ponting. Ascorbic acid. Rapid determination in fresh, frozen, or dehydrated fruits and vegetables. Indus. and Engin. Chem., Analyt. Ed. 14(11):846-849. 1942.
- G. Mackinney and L. B. Howard. Sulphite retards deterioration of dehydrated cabbage shreds. Food Indus. 16(5):355-356, 406-409. 1944. (With Univ. Calif.)
- B. Makower and S. Myers. A new method for the determination of moisture in dehydrated vegetables. Proc. Inst. Food Technol., pp. 156-164. 1943.
- *B. Makower and G. L. Dehority. Equilibrium moisture content of dehydrated vegetables. Indus. and Engin. Chem. 35(2):193-197. 1943.
- *J. P. Nielsen. Rapid determination of starch in vegetables. Indus. and Engin. Chem., Analyt. Ed. 15(3):176-179. 1943.
- *A. L. Pitman, W. Rabak, and H. Yee. Packaging requirements for dehydrated vegetables. Food Indus. 15(1):49-52, 104. 1943.
- J. D. Ponting. Extraction of ascorbic acid from plant materials. Relative suitability of various acids. Indus. and Engin. Chem., Analyt. Ed. 15(6):389-391. 1943.
- A. N. Prater, C. M. Johnson, M. F. Pool, and G. Mackinney. Determination of sulfur dioxide in dehydrated foods. Indus. and Engin. Chem., Analyt. Ed. 16(3):153-157. 1944. (With Univ. Calif.)
- W. D. Ramage and C. L. Rasmussen. This is what it costs to dehydrate vegetables. I-Buildings, plant layout, capital investment. Food Indus.: 15(7):64-71, 137, 138. 1943.
IIA-Processing costs--labor, raw material. 15(8):66-67, 118, 119. 1943.
IIB-Processing costs--summarized. 15(9):75-77, 126. 1943.
- R. M. Reeve. Facts of vegetable dehydration revealed by microscope. Food Indus. 14(12):51-54, 107-108. 1942.
- R. M. Reeve. A microscopic study of physical changes in carrots and potatoes during dehydration. Food Res. 8(2):128-136. 1943.

- R. M. Reeve. Microscopy of oils and carotene bodies in dehydrated carrots. Food Res. 8(2):137-145. 1943.
- R. M. Reeve. Changes in tissue composition in dehydration of certain fleshy root vegetables. Food Res. 8(2):146-155. 1943.
- D. G. Sorber. The relation of the sulfur dioxide and total sulfur contents of dried apricots to color change during storage. Fruit Prod. Jour. and Amer. Food Mfr. 23(8):234-237, 251. 1944.
- *W. B. Van Arsdel. Tunnel dehydrators and their use in vegetable dehydration. Food Indus.: I. 14(10):43-46, 106. 1942.
II. 14(11):47-50, 103. 1942.
III. 14(12):47-50, 108-109. 1942.
- *W. B. Van Arsdel. Some engineering problems of the new vegetable dehydration industry. Heating, Piping and Air Conditioning 15(3):157-160. 1943.
- *W. B. Van Arsdel. Tray and tunnel drying methods and equipment. Proc. Inst. Food Technol., pp. 45-51. 1943.
- *R. H. Wilson, J. O. Thomas, and F. DeEds. Vitamin A value of fresh and dehydrated carrots. Fruit Prod. Jour. 22(1):15-17. 1942.

FREEZING PRESERVATION OF FOODS

Mimeographed information on frozen foods:

- 10 Frozen pork and beans of the tomato sauce type. 1943.
- 34 A test for adequacy of blanching in frozen vegetables. 1943.
- 35 Determination of ascorbic acid in fresh, frozen, and dehydrated foods. 1943.
- 36 Freezing preservation of pumpkin pie stock. 1943.
- 40 Velva Fruit--a new frozen fruit dessert. 1944.
- 46 Selected bibliography on freezing preservation of fruits and vegetables, 1920-43. 1944.
- 53 Home preparation of Velva Fruit--a new frozen fruit dessert. 1944.
- 57 Commercial preparation and freezing preservation of sliced apples. 1944.
- 66 Factors that affect quality in the freezing preservation of peas. 1944.

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- E. L. Overholser, J. A. Berry, H. C. Diehl, M. Boggs, and E. N. Todhunter. Locker freezing of fruits and vegetables. Wash. Agr. Expt. Sta. Pop. Bul. 161. 1941.

How to prepare vegetables and fruits for freezing. U.S. Dept. Agr. ATI-100. 1944.

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- *J. A. Berry. Preserving fruits and vegetables in frozen food lockers. West. Canner and Packer 34(4):50-52. 1942.
- *J. A. Berry. The fewer the bacteria, the better the frozen pack. Canner 94(4):13-14. 1941.
- *J. A. Berry. Frozen foods have good health record. Quick Frozen Foods 6(3):46. 1943.
- M. Boggs, H. Campbell, and C. D. Schwartz. Factors influencing the texture of peas preserved by freezing. Food Res.: *I. 7(4):272-287. 1942. II. 8(6):502-515. 1943. (With Wash. Agr. Expt. Sta.)
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- H. C. Diehl. Report of research in freezing preservation of fruits, vegetables, and poultry products. Proc. Assoc. Refrig. Warehouses. 1943. (Mimeographed copies available.)
- *H. C. Diehl and J. A. Berry. Freezing and storage of frozen-pack fruits and vegetables. Spec. Bul. of Assoc. Refrig. Warehouses, No. 2. 1941.
- *H. C. Diehl and W. Rabak. Packaging of frozen foods under war conditions. Proc. Inst. Food Technol., pp. 117-120. 1942.
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- M. P. Masure and H. Campbell. Rapid estimation of peroxidase in vegetable extracts--an index of blanching adequacy for frozen vegetables. Fruit Prod. Jour. and Amer. Food Mfr. 23(12):369-374, 383. 1944.
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- *D. G. Sorber. Freezing baked beans and other prepared foods. Quick Frozen Foods 5(8):18-19, 24. 1943.
- *D. G. Sorber. Freezing storage prolongs packing season. Quick Frozen Foods 5(9):16, 26. 1943.
- *D. G. Sorber. An analysis of the frozen fruit industry in Utah. Farm & Home Science 5(2):1, 8-10. 1944.

- E. R. Wolford. Direct microscopic method to estimate sanitary history of frozen pack peas. West. Canner and Packer 35(13):58. 1943.

BY-PRODUCTS AND OTHER TECHNICAL SUBJECTS

Mimeographed information:

- 14 Recovery of tartrates from grape wastes. 1943.
28 Preparation of a liquid apple pectin concentrate. 1943.
+70 A process for production of asparagus-juice concentrate. 1945.

Journal articles:

- +G. Alderton, W. H. Ward, and H. L. Fevold. Isolation of lysozyme from egg white. Jour. Biol. Chem. 157(1):43-58. 1945.
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- E. Bickoff and K. T. Williams. Stability of carotene added to solid carriers. Indus. and Engin. Chem. 36(4):320-323. 1944.
- J. F. Carson, S. W. Waisbrot, and F. T. Jones. A new form of crystalline xylitol. Jour. Amer. Chem. Soc. 65(19):1777. 1943.
- +J. F. Carson and W. D. Macley. Xylitol esters of fatty acids. Jour. Amer. Chem. Soc. 66(9):1609-1610. 1944.
- K. P. Dimick. A quantitative method for the determination of tyrothricin. Jour. Biol. Chem. 149(2):387-393. 1943.
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- +E. J. Eastmond. A useful tool for shaping spectrographic graphite electrodes. Jour. Optical Soc. Amer. 34(10):621-622. 1944.
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- H. Fraenkel-Conrat. Effect of light on the Van Slyke method for the determination of amino groups. Jour. Biol. Chem. 148(2):453-454. 1943.
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- H. Fraenkel-Conrat and H. S. Olcott. Esterification of fatty and amino acids with 1,2-epoxides in aqueous solution. Jour. Amer. Chem. Soc. 66(8):1420. 1944.
- H. Fraenkel-Conrat and H. S. Olcott. o-Biphenyl isocyanate, o-Bicyclohexyl isocyanate, N,N'-Di-o-biphenyl urea; N,N'-Di-o-bicyclohexyl urea. Jour. Amer. Chem. Soc. 66(5):845. 1944.
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- E. F. Jansen and D. J. Hirschmann. Subtilin--an antibacterial product of Bacillus subtilis. Arch. Biochem. 4(3):297-309. 1944.
- *C. R. Jeppesen and E. J. Eastmond. Spectrographic determination of lead in pectinous materials. (Abstract) Bul. Amer. Phys. Soc. 18(4):6, and Phys. Rev. 64(5-6):188. 1943.
- C. R. Jeppesen, E. J. Eastmond, and H. G. Logan. Spectrographic determination of lead in pectinous materials. Jour. Optical Soc. Amer. 34(6):313-318. 1944.
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II. Studies on the dispersion of keratins by reduction in neutral solutions of protein denaturants. Arch. Biochem. 3(2):193-202. 1943.
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- E. B. Kester, C. J. Gaiser, and M. E. Lazar. Glycidyl esters of aliphatic acids. Jour. Organic Chem. 8(6):550-556. 1943.

- +L. Kline, L. R. MacDonnell, and H. Lineweaver. Bacterial proteinase from waste asparagus butts. *Indus. and Engin. Chem.* 36(12):1152-1158. 1944.
- A. A. Klose and H. L. Fevold. Methionine deficiency in yeast protein. *Proc. Soc. Expt. Biol. and Med.* 56(2):98-101. 1944.
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- +J. C. Lewis and H. S. Olcott. A lactobacillus assay method for l(+)-glutamic acid. *Jour. Biol. Chem.* 157(1):265-285. 1944.
- J. C. Lewis, J. J. Stubbs, and W. M. Noble. Vitamin synthesis by torula yeast. *Arch. Biochem.* 4(3):389-401. 1944.
- *H. Lineweaver and T. L. Swenson. Enzyme action in slaughtered meat animals. *Proc. Ann. Meet. Amer. Inst. Refrig.* pp. 94-103. 1941.
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- W. D. Maclay, A. D. Shepherd, and H. Lotzkar. Use of pectin in pharmaceutical pastes and ointments. *Jour. Amer. Pharm. Assoc.* 33(4):113-116. 1944.
- +J. R. Matchett, R. R. Legault, C. C. Nimmo, and G. K. Notter. Tartrates from grape wastes. Use of ion exchangers in acid-carbonate cycle. *Indus. and Engin. Chem.* 36(9):851-857. 1944.
- R. M. McCready, H. S. Owens, and W. D. Maclay. The use of fibrous sodium pectate as a substitute for agar in bacteriological gels. *Science* 97(2523):428. 1943.

- +R. M. McCready, H. S. Owens, and W. D. MacLay. Alkali-hydrolyzed pectins are potential industrial products. Food Indus. I. 16(10):69-71, 139-140. 1944.
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- H. S. Olcott, L. A. Sapirstein, and M. J. Blish. Stability of wheat gluten dispersions toward reducing agents in the presence and absence of a gluten proteinase. Cereal Chem. 20(1):87-97. 1943.
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- J. J. Stubbs, W. M. Noble, and J. C. Lewis. Fruit juices yield food yeast. Food Indus. 16(9):694-696, 751. 1944.
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Enzyme Research Laboratory, Western Regional Research Laboratory, Albany, California.

Information (mimeographed):

- 27 Separation of diastase and protein from wheat through the action of sulphites. 1943.

Journal articles:

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